

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**

**REGION IX AIR DIVISION**

Technical Support Document

for

EPA's Notice of Proposed Rulemaking and Direct Final Rule

for the

California State Implementation Plan

South Coast Air Quality Management District

Rule 1107, Coating of Metal Parts and Products

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June 17, 2008

**AGENCY NAME:** South Coast Air Quality Management District (SCAQMD)

**SUBMITTED RULE:** Rule 1107, Coating of Metal Parts and Products  
Amended: January 6, 2006  
Submitted: May 8, 2007  
Complete: July 23, 2007

**SIP-APPROVED RULE:** Rule 1107, Coating of Metal Parts and Products  
Adopted: November 19, 2001  
Submitted: March 15, 2002  
Approved: August 13, 2002 (67 FR 52611)

**PREVIOUS RULE SUBMITTALS:** A previous version of Rule 1107 was approved on November 4, 2005, and submitted to EPA on May 8, 2007.

## **RULE SUMMARY**

SCAQMD Rule 1107 reduces volatile organic compound (VOC) emissions from the coating of metal parts and products. Submitted Rule 1107 contains some reduced emissions limits compared to the SIP-approved rule, and adds an exemption for some photoresist coating operations.

### Revisions to Rule 1107

Revisions to Submitted Rule 1107 include changes made in the November 4, 2005 version and in the January 6, 2006 version.

Changes from November 4, 2005 version:

- This version reduces the VOC limit for extreme high-gloss coatings from 420 grams per liter (g/l) to 340 g/l.
- The category of prefabricated architectural coatings is split into two subcategories, and the limits for each of those subcategories reduced as follows.
  - Single component coatings from 420 g/l to 275 g/l
  - Multi-component coatings from 420 g/l to 340 g/l
- The provision to allow alternative coating application methods now requires alternate methods to achieve a transfer efficiency equivalent or better than that of high-volume, low-pressure spray.
- This version reduces the acceptable output of VOC from an air pollution control device from 50 ppm to 5 ppm.
- The exemption for coating operations that cannot meet 65 percent transfer efficiency has been removed.

Changes from January 6, 2006 version:

- This version adds an exemption for applications applying liquid photoresist coating used for photofabrication of metal substrates with a thickness not exceeding 0.060 inches, provided the annual usage at the facility is 10 gallons or less.

Both revisions of Rule 1107 add or revise definitions applicable to the provisions above, and contain other minor changes that improve the rule's clarity.

## **RULE EVALUATION**

Generally, SIP rules must be enforceable (see section 110(a) of the CAA), must require Reasonably Available Control Technology (RACT) for major sources in ozone nonattainment areas (see section 182(a)(2)(A)), and must not relax existing requirements (see sections 110(l) and 193). The VCAPCD regulates a severe ozone nonattainment area (see 40 CFR part 81) and Rule 1107 must fulfil RACT.

Documents used to evaluate the rule include the following: EPA's *Issues Relating to VOC Regulation Cutpoints, Deficiencies, and Deviations* (May 25, 1988, the "Bluebook"); EPA Region IX's *Guidance Document for Correcting Common VOC and Other Rule Deficiencies* (August 21, 2001, the "Little Bluebook"); and EPA's Control Technique Guideline, *Control of Volatile Organic Emissions from Existing Stationary Sources Volume VI: Surface Coating of Miscellaneous Metal Parts and Products* (June 1978, EPA-450/2-78-01).

Submitted Rule 1107 is consistent with these documents and EPA SIP approval criteria. SCAQMD staff estimate that the potential excess emissions stemming from the exemption for photoresist coatings total less than 2 pounds per day across all affected facilities. This amount is overwhelmed by the 0.8 tons per day emission reductions in the November 2005 version of the rule, and constitutes only 0.03% of total controlled VOC emissions (3.27 tons per day) from this source category. Therefore, the excess emissions are considered de minimis under section 110(l) of the CAA. The remaining amendments clearly strengthen the rule requirements. The rule fulfills RACT and all other requirements mentioned above.

## **RECOMMENDED ACTION**

Staff recommends full approval of submitted Rule 1107 under Section 110(k) of the Clean Air Act to replace the SIP-approved version of Rule 1107.

## **ATTACHMENTS**

1. SCAQMD Rule 1107, Coating of Metal Parts and Products, amended January 6, 2006.
2. SCAQMD Rule 1107, Coating of Metal Parts and Products, adopted November 19, 2001 (SIP-approved rule).

3. U.S. EPA. *Issues Relating to VOC Regulation Cutpoints, Deficiencies, and Deviations*. May 25, 1988 (the "Bluebook," cover only).
4. U.S. EPA Region IX. *Guidance Document for Correcting Common VOC & Other Rule Deficiencies*. August 21, 2001 (the "Little Bluebook," cover only).
5. US EPA. Control Technique Guideline, *Control of Volatile Organic Emissions from Existing Stationary Sources Volume VI: Surface Coating of Miscellaneous Metal Parts and Products*, June 1978, EPA-450/2-78-01.